

# Suffering from hemorrhoids ?



## Patient Information

LHP<sup>®</sup> and HeLP<sup>®</sup>

Minimally invasive laser therapies of hemorrhoids

# What are hemorrhoids and how do they occur?



**Simplified illustration of the rectum**

Intestine

Blood Supply

Hemorrhoids

Sphincter

## **It is not uncommon to suffer from hemorrhoids.**

More than half of all men and women over 50 have the same problem right now as you do. And about 80% of the population suffer from the painful consequences of hemorrhoid disease at least once in their lifetime. Healthy hemorrhoids are cushions of tissue which are essential for the precise closing of the anus. They support the function of the sphincter.

The anus is principally adjusted by the internal sphincter, sealing it off. Hemorrhoid pads sitting on the muscle help to keep flatulence, mucus and thin liquid stool tightly controlled in the intestine. The skin in the anal canal (anoderm) contributes to the so-called fine continence due to its sensitivity.

In the course of life, however, a large number of people experience enlargements or a reduction of these pads. There are 4 stages of the medical condition and different therapy options for these stages. 2<sup>nd</sup> degree hemorrhoids can be treated with HeLP® whereas 3<sup>rd</sup> to 4<sup>th</sup> degree hemorrhoids can be treated with LHP®.

# What can I do about hemorrhoids ?

Hemorrhoids are a taboo topic. People do not talk about hemorrhoids. A hemorrhoid disorder is unpleasant. It itches, it burns and it hurts.

In most cases, self-treatment does not lead to a lasting recovery.

The painful symptoms can disappear spontaneously but usually they come back after a short time. The problem has not been solved at all.

People go to the doctor only when it starts bleeding.

# What happens during surgical procedures ?

The medical treatment of hemorrhoids depends on the stage of the disease. Hemorrhoids are divided into 4 grades. In the initial stage (grade 1), medicinal treatment and diet may be sufficient.

In the advanced stages (hemorrhoids are forced out during bowel movements), they are usually treated surgically, whereby the excess hemorrhoidal tissue is removed (cut out).

As a rule, this also means that the sensitive anoderm can be injured and has to be removed partially. Thus, in addition to pain, this surgical procedure can cause a variety of complications.

**Unique FUSION®  
technology from  
biolitec®**

The silica glass caps by biolitec®  
are fused to the fiber instead of  
merely glued.

That way we offer maximum  
stability and safety during  
therapy.

# Gentle laser treatments with LHP<sup>®\*</sup> and HeLP<sup>®\*\*</sup>

The minimally invasive laser procedure HeLP<sup>®</sup> for 2<sup>nd</sup> and LHP<sup>®</sup> for 3<sup>rd</sup> to 4<sup>th</sup> grade hemorrhoids provide the attending physician with gentle new treatment options. The aim of a medical treatment is controlled shrinkage of the hemorrhoids while maintaining their function.

LHP<sup>®</sup> offers best possible preservation of the closing muscle, anoderm and mucous membranes.

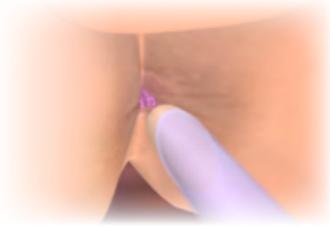
HeLP<sup>®</sup> is an ambulatory treatment option which can be done with no anesthesia at all.

\* **LHP<sup>®</sup>** is the abbreviation for **LaserHemorrhoidoPlasty**, i.e., the shaping of hemorrhoids (to their normal size) with the help of laser energy

\*\* **HeLP<sup>®</sup>** is the abbreviation of **Hemorrhoid Laser Procedure**

# Laser treatment with HeLP<sup>®</sup> for 2<sup>nd</sup> grade hemorrhoids

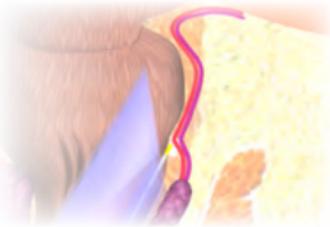
1. A proctoscope is inserted with a lubricant.



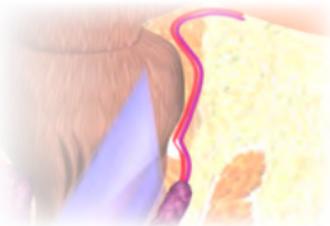
2. The exact position of the arteries is determined with a Doppler probe.



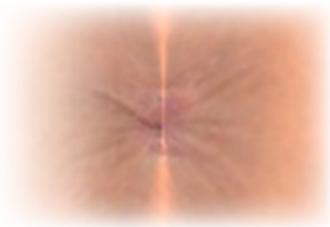
3. The artery is closed with a laser light pulse by the HeLP<sup>®</sup> laser fiber.



4. The treatment can now be continued in the remaining places.



5. The hemorrhoids shrink and slowly regress as a result of the treatment.



# What are the effects of laser treatment with HeLP<sup>®</sup> ?

Due to the targeted penetration of the laser, the enlarged hemorrhoids will also be cut off from their blood supply. The tissues shrink and relieve the hemorrhoids of their oversupply. Furthermore, continued sagging of the tissue is prevented by fixing it to the muscle layer below.

Within 7 to 14 days of the procedure, the bleeding decreases as a result of the hemostatic effect of the laser. The hemorrhoidal tissue shrinks. This process continues over a period of up to 10 weeks.

# What are the advantages of HeLP® ?

HeLP® is a clean endoscopic treatment in which arteries are closed using photocoagulation. There are no incisions and no tissue is removed.

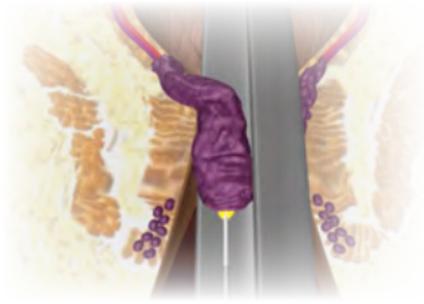
HeLP® treatment with laser radiation for 2<sup>nd</sup> grade hemorrhoids stands out due to the following advantages:

- High level of safety
- Ambulant surgery within 10 - 15 minutes
- Freedom from pain and symptoms
- Quick return to everyday life activities
- Very good results in 12 months

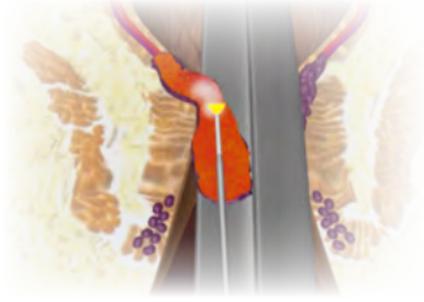
If surgery is inevitable how is it done minimally invasive?

# Laser treatment with LHP<sup>®</sup> for 3<sup>rd</sup> to 4<sup>th</sup> grade hemorrhoids

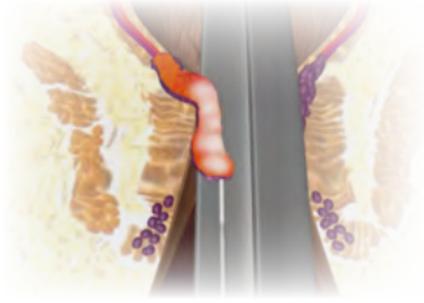
1. The laser fiber is placed in the center of the hemorrhoidal tissue under direct vision.



2. Each hemorrhoid is specifically shrunk from within with the LHP<sup>®</sup> laser fiber.



3. The hemorrhoids shrink and slowly regress as a result of the treatment. Due to the targeted penetration of the laser, the enlarged hemorrhoids will also be cut off from their blood supply. This leads to a decrease in bleeding within a few days of the laser treatment.



# What are the effects of laser treatment with LHP® ?

The new minimally invasive LHP® procedure protects the sensitive anal skin (anoderm): The hemorrhoids are shrunk from the inside with a thin laser probe under appropriate anesthesia, without injuring the anoderm. There will only be a very small wound.



LHP® fiber

# What are the advantages of LHP® ?

The LHP® treatment is suitable for patients with 2<sup>nd</sup> to 4<sup>th</sup> grade hemorrhoids. Compared with conventional surgical procedures, there are usually no cuts, and no tissue is removed.

The LHP® treatment with laser radiation has the following advantages:

- Target-specific tissue reduction in the hemorrhoidal nodes
- Maximum preservation of fine continence
- Best possible preservation of sphincter, anoderm and mucous membranes
- Quick return to everyday life activities
- Optional combinable with different methods of therapy

The costs will be covered from your health insurance funds upon consultation with your physician. In some cases, additional payment from the patient may be required.

Benefit from the gentle therapy options for the treatment of hemorrhoids with the innovative laser procedure from biolitec®.

Ask your physician about the options for treating hemorrhoids with laser.

Ask for LHP® and HeLP®.

For more information about the LHP® and HeLP® treatment don't hesitate to contact us: +49 6172-27159-11. You will receive medical information directly from your physician.

Your physician on site

Please visit our website:  
[www.hemorrhoids-info.com](http://www.hemorrhoids-info.com)



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